Mr. R. V. Le Sueur.

The Province of Alberta

IN THE MATTER OF "THE NATURAL GAS UTILITIES ACT"

—and—

IN THE MATTER OF an Enquiry into Scheme to be adopted for Gathering, Processing and Transmission of Natural Gas in Turner Valley

G. M. BLACKSTOCK, Esq., K.C., *Chairman*

Dr. E. H. BOOMER, F.C.I.C., *Commissioner*

Session:

CALGARY, Alberta June 21st, 1945.

VOLUME 29.

I N D E X

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June 21st, 1945.

WITNESSES

W. C. Kirkpatrick

H. LeM. Stevens-Guille

EXHIBITS

9.30 A.M.Session.
June 21st, 1945.

THE CHAIRMAN: Have you any further cross-examination, Mr. McDonald?

MR. McDONALD: No, no further cross-examination.

THE CHAIRMAN: Mr. Harvie?

MR. HARVIE: No further examination.

MR. CHAMBERS: I have one or two things.....

MR. HARVIE: Just excuse me for one minute. I did speak to Mr. Kirkpatrick about getting some further information that would be given by him or by Mr. Stevens-Guille?

A Yes sir.

Q I think Mr. Stevens-Guille will be able to give you that during the discussion on the sharing position.

MR. CHAMBERS: There was some information that Mr. Fenerty asked for. I think Mr. Kirkpatrick has prepared that.

Q Just what is this document that you have got, Mr. Kirkpatrick?

A Well yesterday morning during the examination Mr. Blanchard asked me what the differences were that occasioned the tax as paid or as computed by us of $163,191.69 as opposed to a straight 40% calculation, and I explained that certain items such as incorporation expenses and the disallowable depreciation for tax purposes entered into the computation, and Mr. Fenerty suggested that that be put in the form of a table and that is what this exhibit is.

Q We will mark this Exhibit.....

THE CHAIRMAN: No. 85.

MADISON STATEMENT TO SHOW INCOME TAX CALCULATION FOR YEAR 1944 MARKED EXHIBIT 85.

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CROSS-EXAMINATION BY MR. FENERTY

Q There was one other question I think I should ask before the re-examination. First, in connection with this statement, Mr. Kirkpatrick, I see an item "Amortization and Depreciation as booked " added totalling $102,222.12, less "Amortization and depreciation claimed" $42,663.51?

A Yes sir.

Q Would you explain just briefly the basis of that calculation of $42,000.00?

A Yes sir. As you recall in our computation of the amortization and depreciation as booked of $102,222.12, we explain that That sum had been arrived at by taking the appraisal value given to us by Mr. Hill in his Exhibit 69.

MR. CHAMBERS: 59.

A 59, I beg your pardon, and applying to those assets 4 decimal something per cent for the year 1944, and the straight line method on such equipment as automobiles, office equipment, fire truck, etc. The same rates were applied to the net cost on Royalite's books in determining the $42,663.51.

Q Now, what is the net cost?

A The net cost on Royalite's books is the difference between the original cost and the depreciation taken by them up to that date that Royalite disposed of those assets to Madison.

Q And it is at all times taken on the depreciated value?

A Yes sir, that is correct.

Q Now there was just one other question, Mr. Kirkpatrick. We had some discussion yesterday about various statements that had been prepared showing divisions of operating costs, and we have the statement originally prepared for special purposes, and then you had a statement prepared for income tax purposes.

Now had we then referred to all of the statements that have been prepared from time to time that you know of?

A All that I have any knowledge of yes sir.

Q Either by Royalite or Madison?

A Well our statements prepared by Madison, you see them here, sir.

Q And you have told us all of Royalite's that you have any knowledge of prepared for any purpose whatsoever?

A That relate to the matter of the division of costs?

Q Yes?

A Yes sir, that is right.

Q Whether for internal use or for the use of other parties that we are not concerned with or otherwise?

A That is right.

Q That is all.

.....

RE-EXAMINATION BY MR. CHAMBERS.

Q Mr. Kirkpatrick, would you turn to Exhibit 81, which is M-12, and the last two sheets of that exhibit are called Schedule M-12-B, Pages 1 and 2?

A Yes sir.

Q That statement gives, as I understand it, the total gathering and compression costs for the five years from 1944 to 1948, at what figure.

A You are referring to the $2,354,249.31, I take it?

Q Yes?

A That is the estimated for the five year period.

Q From 1944 to 1948, both inclusive?

A Yes sir.

. . . . . .

Q And it is my understanding that that figure of $2,354,249.31 is the estimate of what your company conceives to be the probable cost of the operations for the next five years?

A Yes sir.

Q And in those costs are the ordinary operating costs such as wages and repairs, etc. to the physical system?

A That is correct.

Q And there would be the depreciation on the system, of course?

A Yes sir.

Q And the income tax of the company allocated to that operation?

A Yes sir.

Q And there would be the rate of return on the investment?

A That is correct.

Q And the proportion of the administration?

A Yes.

Q And that figure also includes the cost of the gathering and the initial compression of the gas which it is proposed to be re-pressured until the end of 1948?

A Well that sum includes our estimated entire cost of the wet gas gathering compression system and the volume of gas that might be transported through that system and subsequently the storage in Turner Valley, and included in as part of that cost.

Q Now I am going to ask you to do this, assuming that that same system, and I am talking of the physical system, the gathering system and the initial compressing system, were used during that five year period merely to gather and compress sufficient wet gas to meet the current market requirements of dry gas, what effect would you estimate that would have on the total over-all cost for the five year period?

A The effect I would estimate on the two million, three hundred and fifty-four thousand odd dollars would be relative incidentally just at an outside figure perhaps. Probably 1% or something on that order, or twenty-three thousand or twenty-four thousand dollars, largely comprising such items as lubricating oil and grease which are directly geared to the service use of the machines themselves, that is, the compressor equipment.

Q And now let us analyze that. The depreciation would be the same, as I understand it, am I right in that?

A That is correct.

Q That is the charge under the depreciation would be the same?

A Yes.

Q And then your capital investment would be the same?

A Other than the investment which would be necessary for the storage, which would be separate.

Q Yes, but I am talking now about the gathering system itself and the initial compression?

A That investment would be the same as it is now.

Q And the return on that would be the same?

A Yes sir.

Q The proportion of the administration would not vary, I take it, in your opinion?

A No, it should be about the same.

Q Now then, the direct operating expenses such as the labour and wages to actually operate that part of the system, what effect would it have on that if any?

A Well I think it would be something in the neighbourhood of that sum which I mentioned, approximately 1%, that is, looking at the individual costs of those plants. I cannot see that

there would be any substantial reduction in the pipe lines themselves as far as operating costs are concerned, or in the compressor plants. The direct supervision and the costs of the operator would remain the same. The labour and material repairs would be substantially the same. The most important item that might be affected is the cost of oil and grease and gasoline as we have shown it here. There would be an incidental, perhaps, lessening of the cost of steam and power but not to any important extent. The cost of the administrative service such as office, transportation, etc., would not be changed to any important extent. I would think that 1% would be a liberal estimate of the extent to which it might be changed with a slight lessening in the volume.

Q And that 1% of the total figure would be about $23,549.00 or thereabouts, over the five year period?

A Yes sir, that is about right.

Q In other words, as I understand it, if the gas which it is now proposed to repressure during the years '45 to 1948 were flared at the well or was not produced at all, that Madison's cost of gathering and compressing gas for the market, the rates to the Gas Company so far as this operation is concerned, would be practically the same.

A I think so.

Q Now then, I want to examine with you for a moment Exhibit 78 which is M-9, and I just want to get or collect and have put on the record in one place the estimated costs of repressuring for this period, from now until the end of 1948 as taken from this Exhibit 79, and that is found in the schedules in M-9-A is it not?

A That is correct, Mr. Chambers.

Q And for the year '44 there is a comparatively insignificant amount of $1,469.49

A Yes.

Q And then turning over to the next one for the year 1945, the amount is $48,472.78?

A Correct.

Q And in '46 it is what?

A 63,033.98.

Q Yes. And in '47?

A $66,112.48.

Q And in '48?

A $66,845.41.

Q Have you got the total of that?

A No sir, I have not.

Q I have totalled it up and I make it, and I wish you would verify it, Mr. Kirkpatrick, $2,45934.14, probably you can check my figures, Mr. Kirkpatrick?

A Yes, that comes to $245,934.14.

Q And that figure represents the total estimated cost or total estimated costs that are attributrble solely to repressuring to the Madison system to the end of 1948?

A Yes sir.

Q And that includes, of course, a rate of return on the investment, and the other items that have been referred to in the gathering?

A That is correct.

Q And that is an item of $245,934.14.

Q I next intend to refer to Exhibit 47, which is known otherwise as M-2 Revised. Have you a copy of that there?

A Yes sir, I have.

Q Will you turn to Table 2A, which is headed "Estimated Volumes to be stored in the Royalite Gas Cap and Bow Island."

A Table 2A you are referring to?

Q That is right.

A Which column?

Q I am asking you to refer to column 6.

A Oh yes.

Q You will observe column 4 deals with Bow Island separately.

A Yes.

Q And column 6 is headed "Stored in Turner Valley." And I mean for the purposes of the record, if there is any doubt about it I will let Mr. Stevens-Guille clear it up, but this column 6, Table 2A of Exhibit 47 has no reference whatever to the B. A. Storage nor to the Bow Island storage. Now looking at that table, under column 6 headed "Stored in Turner Valley", you find that there is no figure for the year 1944.

A That is correct.

Q And the figure for 1945 is what?

A 1,697,000 m.c.f.

Q For 1946?

A 3,128,000 m.c.f.

Q And 1947?

A 3,558,000 m.c.f.

Q You are reading column 6 are you not?

A Yes sir.

Q Yes and the last figure you gave me was 3,558,000 m.c.f.

A That is right. That is for the year 1947.

Q Now 1948.

A 3,166,000 m.c.f.

MR. BLANCHARD: Is this storage in Bow Island?

A No, storage in Turner Valley. Column 6.

MR. CHAMBERS: Would you mind totalling those for me?

A 11,549,000 m.c.f.

Q So I take it that 11,549,000 m.c.f. is the estimated amount of gas to be repressured.

A That is right.

Q Which entails that total cost of $245,934.14 that you told me about a minute ago?

A Yes sir.

Q I wonder if you could work out, or have you worked out - and I mentioned this to you before - what that happens to work out at per m.c.f.

A Unfortunately I have not got the calculation with me but I think it is very close to 2.13 cents.

Q That is dividing the $245,934.14 by 11,549,000 m.c.f. Now turning to Exhibit 82 for a moment, which is M-13, and on the Schedule called M-13. That shows what you estimate the total scrubbed gas to be handled by the Madison system or by the Madison scrubbing plant during this period to the end of 1948 does it not,

A That is right.

Q What is that figure.

A The total for the five years' period is estimated to be 65,192,637 m.c.f.

Q That is for the period of 1944 to 1948 both inclusive?

A That is right.

Q How much was it for 1944 which is past and gone?

A 15,458,237 m.c.f. are related to the calendar year 1944.

Q And if we subtract the 1944 from the five year period figure, we get, according to my computation, 49,734,400 m.c.f. Is that correct?

A I agree with that.

Q Now if the consumer or the gas Company should pay for that repressuring cost, namely $245,934.14, through the price of the gas to the market for the years 1944 to 1948 according to my computations that would add to the marketed price about a half a cent per m.c.f. if that was paid currently.

A That is correct.

Q Now on the other hand, if each and every m.c.f. of this repressured gas should remain in storage we will say for 15 years - I am asking you to assume this - and 2.13 cents was the average repressuring cost per m.c.f. and that figure of 2.13 is capitalized, and I am asking you to assume this, at say 9½ per cent per year before income tax - I am leaving that out of the picture - I suggest that the consumer would eventually, if he is going to buy it, would have to pay at the time of withdrawal, 8-1/3 cents to cover the repressuring costs alone.

MR. HARVIE: What figure is that?

MR. CHAMBERS: 8-1/3 cents.

A Yes sir.

Q I had the witness figure this out last night for me.

A Yes, I agree with that calculation.

Q And that 2.13 cents which is the present cost of repressuring, makes no allowance as I understand it for cost of obtaining or maintaining a storage area for the gas.

A No, that is not included in that 2.13 cents.

Q It makes no provisions for the cost of input wells?

A No.

Q To be used in connection with the storage area?

A No sir.

Q Of course it does not take into consideration the ¼ of 1 cent per m.c.f. royalty that has to be paid the Government either now or at the end of the 15 year period?

A No. No royalties are included in that.

Q It takes nothing into consideration for the price of the gas itself?

A No sir.

Q Or the value of it today?

A No sir.

Q Have you Volume 28, that is yesterday's transcript?

A No sir, I did not bring a copy with me.

Q Would you turn to page 2195 of Volume 28 where you were being cross-examined by my friend, Mr. Fenerty, towards the bottom of the page. I am summarizing what I appreciate you said that when apportioning the compression costs downstream from the absorption plant as between the gas going to market and gas being repressured, you did not use the volumetric basis but rather the horsepower employed because, and I am quoting now Mr. Fenerty's words, "because other factors being considered were not equal". As I understand it there is a greater - in this computation that you did use you allocated a greater horsepower to the volume handled of the gas for repressuring than you did for the gas going to market, is that right?

A That is approximately correct, sir.

Q Now in other words am I correct in this that you considered that the two operations were inherently different?

A They were inherently different to this extent as I see it that the volume being repressured required a greater amount of horsepower effort for each 1000 cubic feet of gas being so stored.

Q That is you need considerably greater pressure, as I understand it, to put gas back into the ground.

A That is right.

Q To put 1000 cubic feet of gas into the ground than you do to send it from the scrubber or the absorption plant direct to the Gas Company's system.

A That is my understanding.

Q And the actual fact as you understand it is that there is more power required to handle 1000 cubic feet of gas going into the storage area than there is handing it over to the Gas Company.

A Because of the greater pressure.

Q And can you - and if you are not familiar with it, say so but if you have any information about it you can say so - can you tell me whether there is any inherent difference, and I am talking about inherent to the operation, can you tell me whether there is any inherent difference in the process or operation of gathering and compressing of dry gas and wet gas.

A Do you mean in the field, sir?

Q Yes.

A I cannot see any inherent difference, no.

Q Let me put this to you, from what you know of this operation, the accounting costs and so on, would Madison's actual cost of the handling of wet gas be more or less as the market or

realization price of the gasoline content increases or decreases?

A The operating costs would remain the same. There is no relation. They would remain exactly the same regardless of the rise or fall in the price of gas or gasoline.

Q Because your costs, as I understand it, are estimated on the amount you have invested and estimates for wages for people carrying on the operation and income tax and administration costs?

A That is right.

Q Thank you.

RE-CROSS EXAMINATION OF THE SAME WITNESS BY MR. FENERTY.

Q I do not want to trespass upon the time but there were several new points that I would like to have a little more information on, Mr. Kirkpatrick. You told my friend, Mr. Chambers, that on the basis of gathering wet gas sufficient for the dry gas market, the cost . . . . . At all events, you were discussing with Mr. Chambers the gathering of wet gas on the basis of sufficient to supply the dry gas market.

MR. HARVIE: Speak a little louder, Mr. Fenerty.

Q MR. FENERTY: Did you by any chance consider the situation on the basis, assuming that you were gathering dry gas in those lines for the market - I am going to suggest to you if you had that situation before you having in mind the initial well pressures, whether it is bottom-hole or top-hole or rock pressure or top-hole pressure, that you would have no compression costs at all.

A I cannot answer that, Mr. Fenerty. I am afraid that is an engineering question

Q All right. Now then, you did say to my friend that the cost

of compression would be the same whether the gas was flared or repressured. I think you said that.

A No sir. Not that way. I think Mr. Chambers' question to me was worded somewhat along the following lines that if the gas which we contemplated will be repressured were instead either flared at the well or not produced.

Q Yes.

A To what extent would the operating cost of gas gathering and compression system be changed while that system is merely supplying the residue market.

Q Yes.

A My answer to that was that it would at the outside, according to my estimate, be in the order of $23,000.00.

Q You were referring to the day by day operating cost?

A I am referring to the over-all picture for the five years.

Q Were you referring to the over-all picture or day by day operating costs?

A I had reference to the total which we have taken for the five years.

Q Dealing with the over-all costs for the period of five years I suggest to you - and you will tell me whether I am correct - that the problem of compression equipment installation has been accelerated and additional units provided for because of the necessity of repressuring the gas cap.

A That is not my understanding but I think it would have to be confirmed by engineering evidence, because those engines would have been required in any event.

Q If that were so, then your conclusions are faulty.

A If that were so?

Q Yes.

A I would be wrong in my estimate to some extent. I do not

know to what extent.

Q We are saying the same thing.

A Yes.

Q Now I want to put the picture in the opposite position to that put to you by Mr. Chambers. Leaving out the repressuring of the gas cap and let us assume there was no such program. I suggest to you that your compression costs in order to get your wet gas to the absorption plant, would be exactly the same as those required to get the gas down stream from the absorption plant into the dry gas mains.

A I wonder would you mind, Mr. Taylor, reading that back for a moment. I believe I know your question but I would like to be certain.

BY THE REPORTER(READING): Q. Now I want to put the picture in the opposite position to that put to you by Mr. Chambers. Leaving out the repressuring of the gas cap and let us assume there was no such program. I suggest to you that your compression costs in order to get your wet gas to the absorption plant, would be exactly the same as those required to get the gas down stream from the absorption plant into the dry gas mains.

A I think that is a reasonable assumption to make.

Q And as far as you know, the only reason we have got a compression problem at all is because you have got an oil operation at the well.

A Well, again Mr. Fenerty . . . . .

Q Do you know?

A I do not know.

Q Do you know anything about that?

A No sir.

Q Then we will talk to somebody else about that. Thank you.

MR. CHAMBERS:

Q There is one question I would like to put to Mr. Kirkpatrick arising out of the last proposition that Mr. Fenerty put to him. I am going to be frank that I got the information from Mr. Stevens-Guille. Have you considered this, Mr. Kirkpatrick, that if the absorption plant were operating in disregard of any market for gas, for dry gas, there would be no peak load problem and that would involve much lesser installed compressor capacity.

A Well I have not considered it, Mr. Chambers. I can see where that situation would very likely arise if the operation of the gasoline plant were on a level load per day per year.

(Go to page 2234)

Q Well you know this, as I understand it, an absorption plant is like any other manufacturing plant so far as that is concerned, it can operate on an even load with regard to other people's movements?

A Yes I think that is right.

MR. CHAMBERS: I will deal with that more fully with Mr. Stevens-Guille.

MR. STEER: I have no further questions.

THE CHAIRMAN: Anything further?

CROSS-EXAMINATION BY MR. BLANCHARD:

Q Mr. Kirkpatrick, I want to go rather far afield in this question but the Gentry contract, are you familar with the terms of that?

A Well it is not a contract.

Q It is a letter?

A An exchange of letters.

Q Yes?

A I am familar with it. It is quite a detailed letter.

Q That was for the furnishing of labor to lay the pipeline, the additionals pipelines in 1944, rather in 1943 and 1944?

A 1944, Sir.

Q Now have you any comparative, have you worked out the comparative costs under the Gentry contract and the cost of laying the pipe per foot with your own labor force?

A With our own labor force.

Q Yes?

A Well we have not done it on that basis, Sir, because the Gentry arrangement was the supplying of labor and equipment, that is ditching equipment, tractors, welding equipment and so forth and Madison does not own such equipment.

Q Yes. Well then under the Gentry arrangement, whether it is a

contract or not, your Company had to pay all transportation of labor from the United States?

A Well whether we paid any part of the transportation, - I doubt if it would be all because that Company was also doing work for the British American Company. They quoted a price per foot to do the job and I would assume that in that price they would have included in computing that price at least a portion of those transportation costs.

Q And you were to pay in United States funds?

A That is right, Sir, yes.

Q Now is there any way in which you can arrive at the comparative costs of labor between labor done by your own force and labor done under this suggested arrangement?

A I doubt that it would be possible to do it on a comparative basis because as I understand it, the Gentry organization was composed of, almost exclusively, skilled men, that is there was no inefficient labor or help in their organization. At the time these pipelines were laid it was very difficult, if not impossible, to employ help with the degree of skill required to do that job efficiently and promptly, so from that standpoint I would question whether it would be possible to properly compare them.

Q I know the reason why that contract was entered into. The work had to be done quickly and efficiently but if you cannot work out a basis for the comparative cost, that is all right?

Mr. Chairman, there are one or two matters here which I would like to consider before Mr. Kirkpatrick leaves for Peru, or wherever it is, when are you leaving for Colombo or wherever you are going?

A Well I am leaving the City on July 2nd and I had planned, unless

I am otherwise required here, to be devoting next week to my personal affairs but if there is anything you feel you would like to have from me I will be at your disposal.

Q Well we will try and meet your convenience as far as possible?

A Oh, Mr. Blanchard, you did ask me yesterday, I am sorry....

Q Yes, a statement I asked for as to the repressuring equipment of the No.I Plant?

A Yes.

Q You have that now?

A Well I will just quote it from memory. You asked me what comprised the $631,000.00 shown as 50% of the capital additions for the year 1944. That is made up of two-six hundred horse-power Cooper-Bessemer engines and some small additional equipment in the water-cooling system, both at the No.I Plant and totalling $126,000.00.

Q The question is then whether that equipment would have been required if there was no repressuring done?

A My information is that they would have been required in any event.

Q That information was from?

A Mr. Stevens-Guille.

Q And Mr. Stevens-Guille will give us that?

A Yes.

MR. BLANCHARD: That is all, thanks.

TO DR. BOOMER: In the series of questions which Mr. Chambers and Mr. Fenerty asked you I did not follow all the conclusion.

Let us take a new supposition, that there was no absorption plant, can you express an opinion as to the cost of gathering gas for the Calgary market under those circumstances?

A Well on that supposition, Dr. Boomer, I would first have to have some knowledge as to what the investment was in the line and

what it would likely be but assuming that the lines and the total investments were the same as it is under our present appraisal setup I still think I would have difficulty in expressing a firm opinion on that, what influence that situation may have.

Q You have no knowledge of the operations prior to the establishment of the absorption plant in Turner Valley?

A Only what I have been told.

Q You do not know whether the capital investment and the operating costs would be less in the absence of the absorption plant?

A No Sir I do not.

Q You believe that the volumetric method of distributing costs of gathering and compressing between the gas market and the absorption plant is a rational one?

A I think it is the proper one because it is the one so far as I have been able to determine which relates to physical facts, physical operations.

Q Is it any more related to the physical facts than say a distribution on the basis of pounds of material extracted in the absorption plant and pounds going to the market in Calgary?

A I think that is a distribution perhaps along the same lines.

Q Would a third distribution equally rational be a distribution on the basis of the British Thermal Unit per cubic foot of gas?

A I do not know that factor.

Q Well heating value?

A Well I do not know whether that would be or not, in the one case we are handling residue gas and heating value has a definite expression of its worth to the domestic consumer and to the industrial consumer. On the other hand the B.T.U. equivalent of natural gasoline perhaps would be capable of only being translated into a propulsive power.

Q It is an important constituent of natural gasoline in its final application?

A Yes but the one thing, Sir, the residue gas is definitely being used for heating purposes to give off heat and in the other case the B.T.U. value of natural gasoline as I understand it in my own elementary way is of engineering significance.

Q Well it is the energy you use but what I want to know is would you agree that a distribution on the basis of pounds is equally rational to a distribution on the basis of cubic feet?

A I think so. If it is related to the engineering standpoint.

Q You do not know enough about heating content?

A I am afraid not.

Q To say whether that is in the same class?

A I am afraid not.

Q I think that is all. No, there is one other question, and I think it was approximately $246,000.00 is the cost of repressuring for the next five years?

A That is the estimate, yes.

Q Does that figure include all charges, including depreciation, 9½% free from income tax....

A On the operation, yes, it does.

Q It includes,like your total figure, the whole thing?

A Yes.

Q All costs that there are of every kind?

A That figure is essentially the amount which is,- assuming the rate return set forth would be recovered by Madison from some source or another.

DR. BOOMER: Thank you, that is all.

TO THE CHAIRMAN:

Q I am interested in the 9½%, Mr. Kirkpatrick; I think you said you prepared your statement and used the 9½% factor on instructions from Mr. Trammell?

A That is correct, Sir.

Q I suppose, Mr. Kirkpatrick, that you, like all the rest of us, have bought Dominion Government bonds lately?

A I certainly have.

Q And they give you 3% per annum?

A That is correct.

Q And that 3% per annum is subject to income tax, if you happen to be in an income tax bracket?

A Yes.

Q So that your actual yield could be, according to your bracket, as low as 1% per annum?

A It could be that low.

Q And yet Dominion Government bonds on the market I understand are 101 now for the short term bonds, is that right:

A I am not familar with recent quotations but I have seen Government, Dominion Government bonds, 3% bonds, quoted at 101.

Q Now that being so and with your knowledge of the world and your knowledge as an accountant, can you express to me your own opinion, - having in mind the value of money just as we have discussed it, - whether you consider that 9½% free of income tax is a fair rate of interest which the public should be called upon to pay, your own opinion?

A For this particular operation we are looking at now?

Q Yes?

A I think so, Sir. If we look at the inherent risks which appear to be involved in the operation. The fact initially that while

we have engineering computations that there are some three hundred and sixty million cubic feet of gas in the ground, at the same time we can see that there must be a point at which the volume of gas which will be extracted annually, towards the latter part of the life of the field, may very well place the cost of gas at such a high level that that three hundred and sixty million may not be utilized.

Q Quite?

A That is my idea, whether it is correct or not.

Q Let me put it to you another way; if you simply had been told to prepare the statement and that you had received no instructions as to the rate of return that you were to ask and it was left entirely and solely to your own judgment, what rate of interest would you have asked for?

A I think I would have adopted the same rate, Sir, because it happens to be the rate that the Valley Pipe Line Company and others utilities operating in this field were earning at that time.

Q Is that right, Mr. Kirkpatrick?

A I think so. I think it is 9½%.

Q They were given 9½% in 1939 but I cut that rate in 1943 to 8½%, and then I thought I was very generous?

A 8½%, I thought it was 9½%. I stand corrected.

Q So that by some happy chance your instructions from Mr.Trammell coincided with the opinion which you yourself would have formed as to the rate of interest that you think your Company should get?

A I do not think that I have just automatically picked that 9½% out, no Sir, but I believe firmly and honestly that I would select a rate something in that neighbourhood. Now you asked me if I were left entirely to my own judgment as to the rate to be applied, in

that event I certainly do feel, I would be more inclined to rely on or make certainly a study of the matter and rely on others' opinions and their judgments. I think it is too important an item both to the utilities concerned and to the consumer and for everyone else, to leave it up to the judgment of someone just making a set of cost statements.

Q And do you consider that the risk involved, is equivelant to the 8½% higher than you would get on Dominion Government bonds after you had paid income tax?

A That comparison has just come up, I know we can go and invest our money in Dominion Government bonds and get 3% before income taxes and by the same token we are at liberty to go out and invest money at say 5 or 6% in an non-risk operation.

Q Where to-day, Mr. Kirkpatrick, can you tell me of a 5%, - where you can get a 5% yield on a non-risk venture?

A On an undertaking.

Q Perhaps on the par value of the stock or of a debenture or a bond but with reference to the market price which you pay for it, will you please, I plead with you, to tell me where I can get that amount of return on my money; do you know of any?

A I cannot quote any one just at the moment, no.

Q Do you know, Mr. Kirkpatrick, the fact is that money in the markets of the world is cheaper today than it was in 1939 when the Valley Pipe Line Company was given 9½%?

MR. CHAMBERS: Now....

THE CHAIRMAN:- If he knows he can tell me.

MR. CHAMBERS: I did not get the first part of your question and it may be my fault, but I think the first part was a statement.

THE WITNESS: - Do I know now, Sir, that money values...

Q THE CHAIRMAN: That the value of money in the markets of

the world today is cheaper than it was in 1939?

A In the markets of the world today is less now than it was at the time the Valley Pipe Line Company was finished.

Q Yes?

A I believe that is an honest statement, a correct statement, but not from my own personal experience.

Q Now if that is true and I think we all know that that is so, how can you still justify asking 9½%?

MR. CHAMBERS: Sir, I take exception to that. I may be wrong but I am not admitting that by any means.

THE CHAIRMAN: Mr. Chambers, I am asking this witness questions and if he can answer them he is going to and if he cannot answer them he can say so.

MR. CHAMBERS: I know but with deference I say, I am not subscribing to your statement and I think the witness should know that.

THE CHAIRMAN: Well I do not care whether you subscribe to it or not, Mr. Chambers, but I do know that that is so.

MR. CHAMBERS: Well I take exception to that statement. I honestly have a different opinion on it and I propose to ask the Witness to show it.

Q THE CHAIRMAN: Will you answer my question?

A I have forgotten just what it was now, would you mind reading that back, Mr. Cutler.

(Reporter reading)

"Q. Do you know, Mr. Kirkpatrick, the fact is that the money in the markets of the world is cheaper today than it was in 1939 when the Valley Pipe Line Company was given 9½%".

"A. Do I know, Sir, that money values...

Q That the value of money in the markets of the world today is cheaper than it was in 1939?

A In the markets of the world today is less now than it was at the time the Valley Pipe Line Company was finished."

A Well my observation of that, Sir, is that while the value of money in the market may rise or fall from year to year or in cycles of three or four or five years, here we are looking at a proposition which apparently has a forseen life of some twenty-five or thirty years. Why should we consider that the rate to be involved, including those risks, should be geared to the money value of the market from time to time, that is each year or each two or three years. I think that the very fact that the undertaking has a long life from a physical standpoint seems to carry with it the inherent risks of competition and increasing costs, putting the value of gas to the point where other markets may have a greater attraction.

(Go to page 2244)

Q DR. BOOMER: Mr. Kirkpatrick, did the Madison Natural Gas Company attempt to raise its capital elsewhere?

A No sir.

Q Did they consider it at all?

A You mean from the general public at large?

Q Anywhere at all?

A No, no attempt was made.

Q Was the situation and possibilities explored?

A Not to my knowledge.

Q THE CHAIRMAN: There is still another method of computing depreciation, Mr. Kirkpatrick, the sinking fund method, have you considered that at all?

MR. HARVIE: I did not hear the question.

THE CHAIRMAN: I asked Mr. Kirkpatrick if there was not still another method of computing depreciation, the sinking fund method, and if he considered that at all?

A No sir, I did not consider it, sir. Since the time that we have prepared our submission on depreciation I have made an elementary study of the application of the sinking fund method and other other methods but I do not qualify as an expert on any other method than this particular procedure we had adopted. However, the information I have been able to get by inquiry and reading with regard to it is that the interest calculation methods are used in very very few instances today. They are not certainly a common commercial or industrial method of determining depreciation of this nature.

Q Have you done any reading on the subject of the sinking fund depreciation method?

A A little and the thought that struck me in readint it is

the interest and the depreciation charge per annum on the operation is less than the procedure which we propose. The same with the annuity method or any other interest computation method. It has to my mind the unfortunate effect of charging the earlier years with a lesser amount of depreciation than the later years, as opposed to our method, and, of course, holding the rate base up to some extent.

Q And it cuts down your operating charges?

A Yes, to the extent of the depreciation.

Q The Calgary Power Company is in Turner Valley is it not?

A I do not know whether they are there. I believe they can supply power there. Whether it is capable of being supplied in sufficient measure for the total requirements I doubt.

Q I suppose you have no idea what the commercial rate or industrial rate may be?

A In Turner Valley?

Q Yes, in Turner Valley?

A Well we have a very very small operation with them, which I do not think is indicative of the total over-all industrial rate which they might apply in a large volume. It is a standby charge which is very nominal.

Q So that you have no way of comparing your estimated price to the Royalite and Valley Pipe Line Company for electrical energy?

A With regard to others?

Q Yes?

A Well I have no information what the Calgary Power's position would be.

Q Has anyone anything further to ask Mr. Kirkpatrick?

.....

CROSS-EXAMINATION BY MR. BLANCHARD:

Q I would like to ask one or two questions arising out of one or two questions that were asked. Is the Royalite business confined to the Province of Alberta?

A Yes sir, I understand so.

Q That is your oil explorations and oil production and so forth are confined to this Province?

A All within the Province of Alberta.

Q And all its operations at present with the exception of perhaps one well are in Turner Valley?

A With the exception of possibly any interests they have in wild cat ventures.

Q Edcept with the possibility of any interest they have in wild cat ventures?

A Yes, that is correct.

Q That is the exploration. That is its exploration for oil?

A That is right.

Q And gas, I suppose?

A Gas.

Q And that costs a lot of money?

A It certainly does.

Q So that the operations of the Royalite are concerned with the production of oil in Turner Valley itself, which has a fairly limited life in the Turner Valley?

A It would appear so, yes.

Q Now do you think the natural gas business with an established market is any riskier than the oil business where you are exploring for oil and spending a large amount of money to do so?

A Well I think the proposition of looking for oil outside of the

proven field is not a risk, it is a pure gamble, especially in this Province.

Q Now do you know what Royalite stock is selling for on the public market today?

A Presently in the neighbourhood of twenty or twenty-one dollars per share.

Q And it is paying a dividend of?

A I think $1.00 per share.

Q That is all.

.....

RE-EXAMINATION BY MR. CHAMBERS.

Q Mr. Kirkpatrick, in preparing the statement using the 9% did you or did you not know the rate of return that the Gas Company was allowed by the Utility Board?

A At the time we were preparing the statement?

Q Yes?

A Yes, I did know that rate, or I believe I knew it.

Q And that is 8½%?

A Yes sir, I knew it at the time that I was preparing the statement, I think.

Q And when you were preparing the statement, the Natural Gas Utilities Act had been passed?

A Oh yes.

Q And you have read that Act?

A I have read it, yes.

Q And you know there is a provision in it that in effect cancels or deals with the contracts that Royalite had with the Gas Company?

A Correct.

Q Thank you.

.....

CROSS-EXAMINATION BY MR. HARVIE.

Q Mr. Kirkpatrick, in answer to a question of Mr. Blanchard's you say that Royalite shares were around $21.00, I think?

A Something in that neighbourhood today.

Q And they were paying $1.00 a share?

A Yes sir.

Q That would be a return of approximately 5%?

A Very close to 5%.

Q Is that $1.00 a share that they paid the entire earnings of the company or do they build up reserves in addition?

A Well I have no knowledge of how they are paying thie $1.00 per share now, but I think their balance sheet will indicate they have a substantial surplus from prior years' operations, let us say.

Q So that the situation is that the capital value of the shares might be increased due to the accumulation of reserves rather than paying out all earned income annually such as a utility is required to do?

A That would have an influence on the value of the shares, especially if the buyer of the shares is discerning enough to examine the balance sheet, that is if the value of the stock has not been driven up through pure market speculation.

Q With your knowledge of both of those companies, the Madison Company and the Royalite Company, do you think the fact that the Royalite through the dividend it has paid, and is paying currently approximately 5%, is comparative in situation with any rate that might be allowed a utility company where there is no chance of capital profit?

A I think the 5% that the Royalite is paying at the present time is the earning, which I presume is the earning which that company is prepared to pay to the shareholder to maintain a continuity in the matter of dividends, and it is

retaining in its own place a sufficient amount of money to carry on diligent exploration work in the hope and expectation of finding something which will result in a substantial increment for the Companies in the future. They are in the business of perpetuating themselves.

Q THE CHAIRMAN: What has been the price range of Royalite stock in the last three years?

A That is a long time to recall, but it has been down, I am quoting from memory now, to fourteen or fifteen dollars. I think that is the low.

Q The fact is that the Royalite has a speculative value apart altogether from its balance sheet value?

A It has perhaps a speculative value but that is limited by the knowledge of anyone interested in oil securities that Turner Valley has apparently at the moment reached its limitation as far as future extensions are concerned. It has the speculative value from the standpoint that I spoke to Mr. Harvie of, that the company is investing money and looking for other oil in this Province, and if it is successful, as we hope it is, then it has a definite speculative value.

Q I think we can say goodbye to you, Mr. Kirkpatrick. I do not think we want to ask you any more.

A All right, sir.

Q Thank you, Mr. Kirkpatrick. Perhaps this is the time that we should have our adjournment before we start with Mr. Stevens-Guille.

MR. CHAMBERS: Thank you, sir.

(At this stage a short adjournment was taken).

MR. McDONALD: Mr. Chairman, before Mr. Stevens-Guille commences I would like to take up the matter of information regarding the Calgary Gas Company's financial position. While we were discussing the matter of statements yesterday, Mr. Steer made a reference to the fact that the Gas Company's books were open and available.

MR. STEER: I do not think that is right. I made a humourous remark that the Gas Company's records were an open book. I am going to stop that sort of thing.

THE CHAIRMAN: But you won't do it. You will keep on doing it, just the same as I sometimes unfortunately do.

MR. STEER: I guess so.

MR. McDONALD: The fact is, sir, I think the point has come in this hearing that the information of the handling of gas by the Gas Company should be made available to the other parties in the hearing. Now that can be made available by the Gas Company filing statements . and what I have reference to in that respect is not only the balance sheets and the ordinary publicized statements of the Gas Company, but also the calculation for their rate base, the rate of return, depreciation, and other elements that enter into or effect the rate which they are now receiving.

THE CHAIRMAN: My recollection of the Gas Company's rate base is that it was fixed, I think, in 1926 by the Public Utilities Board. Now what their rate base has to do from a public utility standpoint I do not know. They possibly have what they call a rate base in their books, I do not know that either. But the Gas Company is not before this Board, Mr.McDonald The same question was raised

by Mr. Fenerty with regard to Royalite. How can I compel the Gas Company, not a party to this proceeding, to do that? They are interested but they are not before us.

MR. McDonald: I am not so sure that that is quite correct, sir.

MR. CHAMBERS: They have been cross-examining quite actively.

MR. HARVIE: It has a pipe line outside of the municipality of the City fof Calgary, through which all the gas goes.

THE CHAIRMAN: The Calgary Gas Company and the City of Calgary, which is affected by the question Mr. McDonald is getting at, are not subject to the jurisdiction of this Board.

MR. HARVIE: The pipe lines from Turner Valley to Calgary?

THE CHAIRMAN: The pipe line from Turner Valley to Calgary is.

M . HARVIE: Yes.

THE CHAIRMAN: But not the Gas Company's operations from the point of view that Mr. McDonald wishes to discuss.

MR. McDONALD: I am not so sure, sir. We have already in evidence .....

THE CHAIRMAN: Mr. McDonald, I say that I as the Chairman of the Public Utility Board have jurisdiction over the matter but we, as a Natural Gas Utilities Board have none. If you disagree with that you will have to go somewhere else to get that opinion changed.

MR. McDONALD: I do not know that it is quite so simple. We have a definition of what the pipeline is in the amendment of 1944, and it says "Any pipe line used for the

transporting of gas from any field or area where such gas is produced to or through any municipality but excluding any distribution system used for the distribution of any such gas to the consumers in any such municipality." And now I think in regard to their pipe line the Gas Company is within the jurisdiction of this Board.

THE CHAIRMAN: The pipe line certainly.

MR. McDONALD: Yes. And I think we are entitled at least to all of the data relative to the running of the pipe line. Now how that can be given without also including some of the other data regarding the City of Calgary, and other municipalities is problematic.

THE CHAIRMAN: You seek to do indirectly that which y9u cannot do directly.

MR. McDONALD: No, Mr. Chairman. Then we arrive at another situation. We have the City of Calgary coming in and filing their submission, which is now in by Mr.Davis, to the effect that any increase in the rate in the field, increase in the gathering charges in the field, will definitely have a detrimental bearing on the distribution of gas in the City of Calgary. The question of the volume of gas is certainly a matter for this Board, and the volume that will be sold. And the question of what the consumer in Calgary will pay is also a matter for the consideration of the Board. If you will remember Mr. Hill in giving his evidence, I believe in answer to questions by the Chairman, stated that a service rate should be fixed at what the reasonable rate should be having regard to the factors inherent in the fixing of the rate and the parties doing the job, but it should not be fixed at a greater rate than the person who was paying for the service can pay. In other words, the ability to pay

in this case of the consumer and the Gas Company is a matter that is now before this Board, and the jurisdiction of the Board extends to the bringing before it of any witness or any company at all who has information that is relevant to the matters before the Board. The Gas Company has gone, and the City of Calgary has gone further. They have taken such an interest in it that they are here. They are not being brought in as outsiders. I do not think that they can possibly escape. And it is absolutely necessary before the Board can give a rational judgment in this matter, for this information to be given. I am not suggesting at all that it is a question of fixing the rate base for the Gas Company, or dealing with the sales of gas in Calgary, but it is with regard to these relevant matters as to the ability to pay a rate thatis going to be fixed by the Board. That is something that this Board certainly should look at and the only way we can get that information is to get the financial position of this one link in the chain between the producer at one end and the consumer at the other.

THE CHAIRMAN: How can we determine ability to pay, Mr. McDonald?

MR. McDONALD: We can determine the ability of the Gas Company. You do not have to determine it but at least it should be looked into. It is a matter at least, that I want to argue upon, whether the Board feels like dealing with it or not. I think it is information which I am entitled to get in this case.

THE CHAIRMAN: All right, Mr. McDonald, what you had better do is serve a Notice of Motion, set out exactly what you want, and serve it on the Gas Company and all the other parties interested and we will hear from you and from

the Gas Company on your motion.

MR. McDONAld: Yes. I was going to suggest that you make that returnable Wednesday.

THE CHAIRMAN: If you wish.

MR. McDONAld: And then carry it on after the adjournment.

THE CHAirman: Yes.

MR. McDONAld: Thank you.

.....

H. LeM. STEVENS-GUILLE, recalled, already sworn, examined by Mr. Chambers, testified as follows:-

Q Mr.Stevens-Guille, you are still under oath?

A Yes.

Q If the Board pleases I am going to examine Mr. Stevens-Guille in the first instance regarding Item No. 4 with regard to the general market sharing arrangements, in regard to the re-pressured gas. Now you are prepared, Mr. Stevens-Guille, a report which has been labelled or called "Madison Report No. M-5"?

A Thatis correct.

Q May we have that marked as an exhibit, sir?

MADISON PROPOSAl FOR SHARING MARKET
MARKED EXHIBIT 86.

Q Mr.Stevens-Guille, would you read the report and make such comments and emphasize such matters as you see fit as you go along?

A Yes sir.

A All right. Before reading this report Exhibit 86, I would like to preface it with one or two remarks. When we came to prepare the proposal for sharing the market we could find no model or criterion to go on. We endeavoured to set our proposal up in so far as the principle used in the simplest way possible so that all parties interested in it would have the minimum of difficulty in following it. That of course does not apply to the mechanics of carrying it out which are, of necessity, quite complicated. The average person is not interested in those mechanics. Those are phases of the operations that are carried out by accountants who are familiar with the type of statement it is necessary to prepare to account according to the proposal that will be submitted.

I would also point out that this proposal has been applied for a matter of three or four months now and has been proved generally practical, although as experience is gained certain parts of the mechanical operation of accounting are simplified and improved.

I would also like it to be clear when I am reading this submission that the British American have indicated their disagreement with certain points in it and as I understand it are preparing now amendments on those points or possibly a complete new submission. We have not seen this up to the present time. Therefore I am not in a position, when I am making my observations as I read this, to compare the relative merits of whatever their submission may be and the submission I am now going to present.

We will pass the index and turn to Page 1.

Proposal

for

Sharing Market

H. LeM. Stevens-Guillo,
Ex. by Mr. Chambers.

Introduction

The two main objects of the Natural Gas Utilities Act are the conservation of gas and the equitable sharing of the market. The present purpose is to deal with the second of these two objectives by outlining our proposal for equitably sharing the market.

It must be understood that Madison must have a method approved in order for them properly to route and account for the gas and to distribute the proceeds to the rightful owners; therefore they are offering the following proposal as an equitable and practical method of sharing the market. No claim is made that the method advanced is the only one possible, it is only offered for what value it may be to the Board in arriving at the final procedure to be followed.

The market for this purpose was considered to be composed of the following distributors and users:

1. Canadian Western Natural Gas, Light, Heat & Power Company.
2. Alberta Nitrogen Company, for their Ammonia Plant in Calgary.
3. Imperial Oil Limited, for their Refinery in Calgary.
4. Valley Gas Company.
5. Valley Pipe Line Company, for engine fuel.
6. Royalite Oil Co. Ltd., for domestic fuel.
7. Gas & Oil Refineries Limited, for their refinery in Turner Valley.

1. Sharing Basis

The production of crude oil and gas in Turner Valley is controlled by the Petroleum & Natural Gas Conservation Board on the formula known as the Brown Plan.

I would like to interpolate there and state that when I use the Brown Plan, what I had in mind was the legal allowable, the Brown Plan being the one current at the present time. But I did not mean to preclude any other legal allowable that the Board might in future set, because the setting of those legal allowables is something I understand is not under the Natural Gas Utilities Board but under the Petroleum & Natural Gas Conservation Board, and this plan is predicated on the use of whatever that legal allowable may be. So wherever later, in this report, the words "Brown Plan" or "Brown Formula" are used I wish it to be understood that I mean the legal plan or legal allowable or legal formula.

This would therefore at first glance appear to be an equitable basis upon which to share the market between all producers; but this would not be true in practice without certain modifications, taking into account operating conditions.

A. Crude Oil Wells

Firstly, all crude oil wells do not produce the gas volume allocated to them under the Brown formula. Clearly their participation in the market should be in the proportion to the actual volume of gas produced and not that permitted under the Brown allowable, which is only a theoretical figure. Furthermore, different operators desire to use different volumes of gas, either for fuel purposes at the lease or for drilling new wells, thus reducing the actual volume they have available for disposal to the market. It would not be equitable for these producers to share in the market on the basis of their total volume of gas produced, as they have already disposed of a certain volume to promote their own interests in other ways, such as the development of their own property or by sale to some other company for

fuel for drilling or similar use.

Some crude oil wells produce at too low a pressure to be able to deliver their gas to any gas gathering system, and it would be uneconomic to lower the operating pressure of the whole g s gathering system in their area sufficiently for the gas from these wells to be gathered.

Perhaps I should have said there it would be exceedingly costly rather than uneconomic.

These wells are not therefore in a position to share in the market.

It is therefore proposed that the basis of participation in the market of gas from crude oil wells be on the volumee actually delivered to the Gasoline Plant to which the particular well is connected. This proposal has the merit that without hindering the use of gas for development purposes, it allows the producer to share in the market in proportion to the volume he is able and willing to deliver to it.

B. Gas Cap Wells

Withdrawals from the gas cap wells are also controlled by the Brown formula, therefore it would appear logical that a suitable basis for participation of these wells in the market would be upon their Brown allowables. In the case of the gas cap wells, no reasons exist for modifying this basis as the full volume produced is delivered for processing to the plant to which the wells are connected.

At the present time there is more gas available to the market from crude oil and gas cap wells under the Brown Plan than the market can absorb, and this condition will exist for some ten to twelve years to come. It is therefore planned to produce the Royalite gas cap wells only to the extent required to make up the balance of market demand, that cannot be

supplied by the residue gas from crude oil wells together with the residue gas from gas cap wells connected to British American and Gas & Oil Products Plants. The prime purpose of this arrangement is to keep to a minimum the size of the compressor installations, as obviously more equipment would be required, if the Royalite gas cap were to be produced to the full limit of its Brown allowable, causing the combined total of residue gas available to the market from gas cap and crude oil wells to be in excess of market requirements in winter, as well as summer, for several years to come. The reduction in investment in compressor installations, which will follow the acceptance of the above proposal, will benefit both consumer and producer by keeping the overall costs of handling gas as low as possible. It would, however, be inequitable, if Royalite were to receive no consideration for deferring the production of their gas cap gas to future years in place of sharing the current market on an equal footing with all other producers, for carrying charges on Royalite's investment in its gas cap wells will continue and also some operating charges.

Let me enlarge on that last remark a little. There will also be some operating charges because it is necessary for Royalite to keep all its gas cap wells at all times available to produce gas if the market situation requires it. That includes of course, if any of the other components of the supply, whether Madison, British American or Gas & Oil Products fail, the gas has to be made up from the Royalite Gas cap, so the Royalite have definitely to spend quite an amount of money keeping those wells ready for use at any moment we may call upon them, either day or night, and it has happened that we have had to do that to quite a large extent.

C. Conserved Gas

It is therefore submitted that Royalite should get full credit for that part of the gas cap Brown allowables which is not produced in order to allow residue gas from crude oil wells to enter the market in excess of their sharing position, the alternative being to flare this residue gas from crude oil wells or instal additional horsepower to return it to the formation for storage.

As pointed out in the paragraph above, that would cause an increase in the unit cost of gas.

It is therefore proposed to term all crude oil gas delivered to the market in excess of the sharing position as "conserved gas", as in fact an equal volume of gas cap gas will be underproduced below the sharing position of the Royalite gas cap and hence conserved. It is proposed that Royalite shall pay the producer for this volume of "conserved gas" at the present worth of that gas, at whatever rate the Board may set, discounted to the date on which the gas cap gas it has displaced on the current market will actually be delivered to the market. Royalite to receive in turn the current market price for the volume of gas so "conserved", as that volume is part of Royalite's share in the market.

At the present time in our estimates which were presented in Report M-2 Revised and Report M-2-A, it is between ten and thirteen years before the market requirement and the volume of gas available to the market would have reached the point at which it will be necessary to use the stored gas in part to supply that market. But of course the actual number of years that should be used to arrive at the discounted price will be

a matter to be determined after the Board has stated what reserve figures they wish to be used. And the situation would also have to be reviewed in the light of the data which has accumulated on the operation of crude oil wells, the rate of decline in the intervening time between this report being written and those reports I have referred to being compiled and the date the Board gives their decision on that point.

Q Mr. Stevens-Guille, my recollection is that one of the Exhibits that you put in, it may have been M-2 Revised (Exhibit 47) you did project and make an estimate of the date on your Plan when this conserved gas would come into the market ?

A Very definitely. I endeavoured to make that clear in my recent remarks.

Q It is Exhibit 47 is it not ?

A I cannot quote the Exhibit number but it is M-2 Revised. We also did it in M-2-A. The point I am making is, we are not saying that these are the final figures that should be used. They naturally should be reviewed in the light of later information. They were just filled out as an illustration of how it can be done.

2. <u>New Installations</u>

High pressure compressor equipment has already been installed by the British American to return excess gas from crude oil wells connected to their Plant to the limestone formation in the gas cap in the area served by their gas gathering system. Madison has made provision to convert two compressor units at their Compressor Station #1 from wet gas booster service to residue gas return service during summer months in order to store excess residue gas from crude oil wells in the limestone formation.

Since this report was written that installation has been completed and has been in operation several weeks, returning gas to the formation.

Q And those units you are referring to there are right at the scrubbing plant location are they not ?

A Yes, at Compressor Station #1, which is adjacent to the scrubbing plant.

Arrangements have been made with Royalite for Royalite #17, Midfield #1 and McLeod #4, all wells close to this compressor station, to be used for input purposes.

I do not think there is any necessity for me to take time to point the position of the wells out on the map. I think probably by now everybody is familiar with that.

Q They are close to the - -

A They are all within one mile of the plant and some of them less. That of course is one reason why the wells were chosen. Their proximity to the plant made the investment in input lines a minimum.

The Madison arrangement covers not only excess gas to market requirements from crude oil wells connected to the Madison gas gathering system, but also those connected to the Gas & Oil Products plant. Arrangements have also been made between Royalite and the Canadian Western Natural Gas Company for gas to be stored in Bow Island at times when the Madison compressor station will not have capacity available.

There again those arrangements have been completed since this report was written and gas is being stored again in Bow Island.

It is proposed that Royalite shall purchase the gas stored in its gas cap at the present value of that gas, at whatever rate the Board may set, discounted to the date on which

the stored gas will be actually used to supply the market. Similarly in the case of gas stored in Bow Island it is proposed that arrangements will be concluded between Royalite and the Canadian Western Natural Gas Company to purchase the gas at its discounted value.

There has been an interim order of the Board covering that arrangement.

3. Accounting Practices

It is proposed that British American and Gas & Oil Products be treated by Madison for accounting purposes as units, and that those companies be responsible for proportioning back to the producers connected to their respective plants, the gas sold in the market.

Sharing the market, on the principles explained above, then becomes a simple matter of proportion based on actual deliveries to the gasoline plants by crude oil wells and also the gas cap wells connected to the British American and Gas & Oil Products gasoline plants, and on the Brown allowables for the Royalite gas cap.

This will be demonstrated a little later when we get to the appendix which is a simplified sheet, setting out such proportioning of monthly totals over a period of one year.

For convenience in accounting, it is proposed that the present custom of monthly settlements be adopted with the proviso that any overs or unders in the sharing position of any party be carried forward and adjusted volumetrically in the succeeding month. If for some reason it is not possible to make complete adjustment in the next month, any balance will be carried over for adjustment in the next succeeding month,

and so on. This suggestion is a revision to that made at the preliminary hearing in 1944 of waiting until the end of the calendar year and then making dollar adjustments, if necessary, after reviewing the whole year's operations; volumetric adjustments being far simpler in actual practice, from an accounting point of view, It will not, of course, ever be possible to obtain precise sharing of the market in any one month, as variations in market requirements, particularly in the last few days of the month, will upset the estimated market figures on the one hand and differences in actual deliveries from crude oil wells, either above or below those estimated, will have a similar effect on the other hand. Consequently it will always be necessary to carry forward overs or unders from one month to the next, but every effort would be made to keep these to the smallest possible practical amounts.

That would also of course apply at the end of each year if that system is worked, it just would be no different from one month. There is bound to be some slight amounts to be carried forward, either over or under.

The Board has already expressed its view that market sharing arrangements should take into account practical difficulties in operations and, in so far as possible, participants should be allowed to deliver above or below their market share, when they are experiencing mechanical troubles, without prejudicing their ultimate position in the market.

That was contained in a letter which the Board addressed to the Madison Natural Gas Company in December 1944, and their wish and thought in that matter have been carried out to a very large degree in the intervening time.

As a central point Madison naturally has to deal with all the operators, taking for that purpose the B. A. and

Gas & Oil Products as operators, in order to adjust the situation according to market demands and Madison has had the utmost co-operation from the people upon whom they depend for that arrangement and I think it might be advisable to just give an illustration of what does happen on that point.

Take for example last Saturday, that was June 16th, Madison had arranged to undertake certain routine work on some of its compressors and at the same time the Ammonia Plant was doing some overhaul work on some of their equipment, which reduced the amount of gas they were consuming to approximately six million in place of ten million cubic feet per day and while both those things were happening, - and I should point out before I go further that the arrangement had been that the Ammonia Plant would be back taking its full amount by June 16th but they were delayed and Madison had held off doing certain repair work until that time for that reason, - these things then were going on and at the same time we got a very warm afternoon and evening and the load in Calgary dropped and the compressor at Bow Island was shut down for some minor adjustments at the critical hour. If these flexible arrangements had not been in operation Madison would have had to flare gas but in place of doing that we were able to arrange with the British American, firstly, to reduce below their sharing position for the day and when that did not prove adequate we were able to arrange with them to turn all their compressors over to repressuring and they were able to do that at that time without flaring any gas.

That is just one illustration of many things. These re-arrangements are made several times in the course of every single day and that is going to be one of the problems of this sharing the market. It will take a considerable amount of time to adjust all the operations to co-ordinate them in order to

prevent flaring gas and to use the equipment which is installed to its maximum advantage.

I would like to call attention to several other things that can affect the situation. A well may be testing and in the course of that test it may have been shut in for a period of time and when it is first opened up the volume of gas is of course above its average production and if that well is turned into the line before the head of gas has been blown off, and that of course would be losing the gas to the atmosphere, it causes a surge in the whole system. It may throw other wells out of line. Immediately something like that happens somebody has got to find out why and where it is and make the necessary adjustment. If it is possible other wells are shut in on that portion of the system so that the well which has been testing can enter the lines and the gas be conserved by being taken down to the plant and ultimately to the market.

Then you have got wells on allowables over different periods of time, some are on thirty days and some sixty and some ninety but some in order to lift the oil in the most efficient manner, that is to say, below its gas-oil ratio, wish to take their allowable out in the minimum of days permitted them by the Conservation Board and very careful scheduling has to be followed with the co-operation of all the different producers connected to the system.

So far Madison has had good co-operation from the very many different producers which are connected with its system.

Another thing that sometimes happens is that arrangements have been made for certain wells to be turned back in at a certain hour and coincident with that arrangement the weather

changes completely, the load drops, perhaps a matter of three or four or five and we have had even ten million cubic feet in the course of two or three hours. That means again arrangements have to be made to turn other wells out. If they are gas cap wells, that is the natural sequence for them, or it has happened, it is summer time and there are no gas cap wells delivering to the line, some crude oil well has to be taken out if it is possible, if the repressuring equipment is inadequate to handle the excess gas, - and I am not trying to bring before you the worst picture, - but such arrangements may have been followed through and then a storm blow up and you have to, in the course of a few hours, go backward through the same steps in order to supply the demand. It would be easier of course to open a gas cap well adjacent to the plant but if that were to be done the gas at some other point possibly would have to be flared at sometime due to the allowables of crude oil wells only running for certain periods.

So I hope I have given some indication of the problems which do exist and which will exist right through the whole operation from now on, of scheduling and routing gas so that the market is always supplied and yet a minimum amount of gas is flared at any point, but you will also see after all these things are all done the system as now exists is flexible, and the amount of gas flared can be kept down to a very considerable degree, much lower than it would be if each unit were to operate just on its sharing position at all times.

Now going back to the narrative on Page 5, starting at the last paragraph.

Keeping all the foregoing points in mind, it is

proposed that both British American and Gas & Oil Products and the crude oil producers connected to the Madison gas gathering system should deliver as far as possible their share of the market each twenty-four hours, and this will be necessary at certain seasons, if gas is not to be flared or compressor equipment overloaded; but, as mentioned above, the accounting is to be on a monthly basis carrying forward the balances to the succeeding accounting period.

Let me elaborate on that point. If the accounting is to be on a monthly basis, while it is necessary to compute the approximate sharing position every day in order to route the gas particularly from the British American, as far as this plan is concerned it does not matter whether the British American produce their gas cap wells on an average per day, per month basis; when this report was compiled several months ago we were under the impression that that was what they wished to do. They have since indicated that that is not the case and so far as this plan goes it is practically in accord with it for their gas cap wells to be produced when it is most advantageous to them in the picture as a whole. I understand that possibly does not go as far as they wish to go in elaborating on this plan but I do want to make that clear at this point in case it is not clear from the narrative. I would also like to stress the fact that the accounting is done on a monthly total. At the end of the month the sharing position is recomputed, therefore variations not merely for the twenty-four hours of the day, - and they are very many, - but from day to day during the month, were all smoothed out and the balance is struck on

those monthly totals. That also makes for flexibility in the whole plan.

Going back to the narrative at the second paragraph on Page 6.

It has been stated above that if the principles proposed are followed, sharing the market becomes a simple matter of proportion. It is important to realize that this statement is correct and not to let the rather large number of steps necessary in actual accounting obscure the simplicity of the underlying principle.

I might say there I have had many smiles from people who have read that, on the staff, but with few if any exceptions, when they have spent the time necessary in studying this to fully understand it I think they are now all in accord, but quite definitely the mechanics of actual accounting are very complicated. We propose to enter as an Exhibit before I leave the stand on this point the accounting for May, is it, yes May, and when you see these you will realize that that statement of mine is perfectly correct that the actual mechanics are complicated and I make the suggestion that people do not go into the intricacies of the accounting with me on the stand because I do not think I would be up to the task of explaining it to anybody in that way. I suggest that the accountants concerned get together and I will be very glad to explain any point to them and we have brought our accountant with us so that he will be available to do that and he will be here next week for the same purpose. Paragraph 3 is next: -

In practice there are several intermediate steps in handling the wet gas from the time it enters a gas gathering

system at a lease until it is finally ready for delivery to the market. In each of these steps the volume is decreased by a small amount, either for use as fuel in the operations or as a shrinkage incurred in the extraction processes. Each and every one of these steps must appear on the accounting books, making the ledger of imposing size and the array of figures discouraging to the uninitiated. If, however, each step is taken in turn no difficulty will be experienced in understanding it and therefore finally in understanding the system as a whole.

(Go to Page 2271)

In Table 1, to be found in the pocket on the back cover of this report, an estimate has been made of the sharing position by months for 1945, including gas conserved and gas stored, as an illustration of the application of the principle proposed. For sake of clarity all the individual steps through which wet gas passes on its way from the well head to the market have not been shown. This simplication does not affect the principle involved, only reducing the complexity of the accounting sheet. In absence of other directions from the Board, the sharing position from February 1st, 1945, is being kept on the basis of this proposal and a full month's accounting showing every step involved will therefore be available at the Hearing. And that is the one I referred to just now as the exhibit we proposed to enter.

Now if you will take your Table 1 out of the pocket at the back.

4. Explanation of Table 1

Before reading the explanation just let me explain, in case you have not figured it out, the initials that appear in the columns after January. M. G. G. S. Our abbreviations for Madison gas gathering system.

Q MR. CHAMBERS: R. O. C. is Royalite Oil Company.

A Yes, Royalite Oil Company.

Q And G.O.P.

A Gas & Oil Products as it was then. I believe the correct designation is G. O. R., Gas & Oil Refinery and B. A. of course stands for British American. Reading from the narrative now.

The steps involved in preparing Table 1 will now be described one at a time.

Column 1

The columns you will notice are numbered in the Tables.

The total wet gas from crude oil wells delivered through the Madison gas gathering system to the Royalite Gasoline Plant for processing is shown. The wet gas processed by the British American and Gas & Oil Products plants do not enter into the accounting at this point because, as explained above, it is proposed to treat them as a unit on the basis of the residue gas they actually deliver to the Madison Scrubbing Plant and that they will proportion back to the wells connected to their respective plants the volume actually sold in the market.

THE CHAIRMAN: That is each of them will deliver?

A Yes, each of them. They are inter-connected with the respective plants? Now these figures given in Table 1 are of course all estimated. They were done before we had completed any of the estimates that were finally used in our submission of reserves, so do not try and tie these figures back to any figures we have submitted later. The fact that there are some differences does not of course affect their value in the illustration we showed in January on the sharing position, but actually the accounting was not carried out that way because the entire British American or G.O.P. residue gas was delivered continuously throughout the months to the Madison Scrubbing Plant. Therefore the position did not arise.

Against "R.O.C. Gas Cap" is shown the total of the Brown Allowables on a monthly basis.

Column 2, equivalent residue gas.

Both the total of crude oil gas connected to the Madison system and the total of Brown allowables for the gas cap

wells have been reduced from a wet gas basis to a residue gas basis , by deducting the shrinkage to absorption gasoline and vapour extraction in the gasoline plant and the proportion of the gas used for fuel in the plants. Again British American and Gas & Oil Products do not yet enter the accounting for the reasons stated above.

Now the amount of shrinkage to absorption gasoline and vapour extraction and the proportionate amount of fuel used in the gasoline plant, I should have said the proportionate amount of fuel in there, please note that there, because there is no account taken here of the fuel used in the Scrubbing Plant and it was taken in this case at 10 per cent.In actual practice on the product now being made, iso-butane and HVO, hydro-carbons, the amount of shrinkage more nearly comes to 15 per cent on an average over the year, but that of course again does not alter the figures from the illustrative point of view.

Column 3, Drilling Fuel.

The volume of residue gas returned to the leases for fuel to drilling rigs is deducted as it is considered not to form part of the market. Again British American and Gas & Oil Products do not as yet enter the accounting, as any residue gas from their plants used for fuel to drilling rigs is not included in the volume of residue gas delivered to the Madison Scrubbing Plant.

I think that is self-explanatory. It is just a question of definition. If the Board here desired, drilling fuel could be considered as part of the market. But we proposed here that as it is only a passing phase and is likely to drop out of the picture within the next twelve

months, that it be not considered as part of the market.

Column 4, Residue Gas available for Market.

In this column is shown all the residue gas available for participation in the market. British American and Gas & Oil Products therefore enter the accounting at this point, the total residue gas available for the market from both crude oil and gas cap wells connected to their plants being entered in this column.

The total residue gas from the Madison system left over after the deductions enumerated in Columns 2 and 3 have been made is available to be utilized in the market, but the proposal is that British American will only deliver the volume equal to its sharing position, returning any balance to the formation in its own area. And that of course is being done at the present time. A compressor has been installed by Madison at their Compressor Station #3 to pump up the residue gas from Gas & Oil Products. The volume delivered to the Madison Scrubbing Plant from Gas & Oil Products will equal the capacity of this compressor or such lesser amounts that may be available. The Royalite gas cap has available a volume equal to the residue gas equivalent to its total Brown allowables, or the figure shown in Column 2.

I think everybody probably appreciates the general principles this sheet is made up on so that I need not spend too much time illustrating and elaborating.

Q MR. CHAMBERS: Mr. Stevens-Guille, am I right in this that Column 4 on Table 1 would be the column that was used for apportioning the sharing positions?

A That is correct, Mr. Chambers.

Column 5, Share of Market.

In this column the estimated share of the market for each of the suppliers is obtained by direct proportion. This proportion is that between the total residue gas available for market as shown for each month in Column 4 and the total estimated market for the month as shown in Column 5. As the estimated market is less than the total residue gas available, the share of the market of each supplier will be less than the amount of residue gas the supplier has available, as shown by all figures in Column 5 being less than the equivalent figures in Column 4.

It just so happens that that worked out on our estimates here. It need not have been the case, of course. Taking for example January, which is usually one of the largest load months the market demand might have been in excess of the total of gas available for that market, but we have not got to consider that possibility as we see it because the last study that we made, which is now some months ago, indicated that we would never be faced with that situation, so that complication does not arise so far as we can foresee. As you will note, taking January, in Column 4, the total available for market was 2,490,100,000, whereas the market, which is the table shown for the month in Column 5, was 2,159,100,000 which is under the amount available so the total of each of the component suppliers is less than the amount they had available.

Column 6, Actual Deliveries.

Now it will be remembered that this proposal for sharing the market is based on withdrawals from the Royalite gas cap only equalling the balance of the market which cannot be supplied by residue gas from crude oil wells connected.

Therefore in Column 6, the volume of gas shown delivered to the market from the Madison gas gathering system and Gas & Oil Products, is not their share of the market from Column 5. I would like to correct that. I said from Column 5 but I think it would clearer if it was stated as computed from Column 5. And it would read the volume of gas shown delivered to the market from the Madison gas gathering system and Gas & Oil Products, is not their share of the market as computed from Column 5, but the total residue gas available for market as shown in Column 4. In the case of British American, however, the volume equal to their sharing position only will be delivered to the market as they have made arrangements to return the balance to the formation in their own area. Therefore, the figures in Column 5 & 6 are the same in their case. The balance of the market above the total residue gas thus available will be supplied from the Royalite gas cap under this proposal, and it will be noted that the figure in Column 6 is not only less than the quantity available as shown in Column 4, but also less than their share of the market as shown in Column 5.

In Column 4 the amounts available on the residue basis computed from the current allowable is 604,500,000 and in Column 5 their share of the market is 524,200,000, yet actual deliveries are only 339,100,000, or delivery of 185,100,000 below their sharing position, and you will see subsequently how the accounting for that is handled.

As explained above, the difference between Royalite's Gas cap share of the market and its actual deliveries represent gas conserved, as an equal volume of gas from crude oil wells connected to the Madison system and from the wells connected to Gas & Oil Products will have in physical fact

been delivered to the market above their sharing position. That, in other words, is the concept of conserved gas illustrated.

For simplicity one step has been omitted from the table, the deduction for shrinkage resulting from extraction of hydrogen sulphide and carbon dioxide in the Scrubbing Plant and for the proportionate volume of the total fuel consumption of the plants used in the scrubbing process. As it decreases each volume on a percentage basis it does not alter the relative positions in the market of the suppliers. Provision will, of course, be made to allow for it in accounting statements. When you get that accounting statement as an Exhibit, you will be able to check that that has been done.

The remaining columns on the table distribute the volume according to the actual physical disposition of the gas, to the market, stored or conserved. For the Royalite gas cap the position relative to the Brown allowables is also shown. Each column is discussed in detail below. But before taking up that discussion, I would like to point out that in preparing this table no account was taken of any gas flared at the Madison plants. The estimated quantity is small and so far those estimates have been realized and it was only a computation which we did not think the value of adding it in was worth while. It of course was taken into account when the accounting statements were made.

Column 7, To Market.

This shows the volume of gas from the Royalite gas cap actually withdrawn and delivered to the market, and the figure is obtained from Column 6.

Column 8, Withdrawals below Brown Plan.

This shows the difference between the Brown allowables for the Royalite gas cap and the actual withdrawals given in Column 6 and repeated in Column 7. Taking the January actual withdrawals in Column 6 and repeated in Column 7 they are 339,100,000, and the amount that it is below the Brown allowable is shown in Column 8, 265,400,000.

Column 9, Withdrawals below share of market.

This shows the difference between the share of the market of the Royalite Gas cap as found in Column 5, and the actual withdrawals calculated in Column 6 and repeated in Column 7. This difference represents the total gas conserved as given in Column 21.

That figure for January is 185,100,000 as shown in Column 9, and moving across to the last column, Column 21, there is also the total amount of gas conserved, 185,100,000. In Column 18, the proportion of crude oil gas conserved that was connected to the Madison gas gathering system is shown at 147,600,000, and the proportion of crude oil gas from wells connected to the G.O.P. shown in Column 20, is 37,500,000, which makes up that total already mentioned of 185,100,000. As you will note, in Column 19 there is no crude oil gas conserved for wells connected to the British American plant because they are not a participant in the scheme involving conserved gas. We just put the column in there to make it clear that they have no gas in that system.

Column 10

Shows the actual volume of gas from crude oil wells connected to the Madison system that is physically delivered to the market. This volume must not be confused with that sold to the market, which is the figure in this column less the volume of gas conserved, which is shown in Column 18. There are two distinct things there that I think everybody now is fully familiar with.

Column 11

Shows the actual volume of gas from wells connected to the British American plant that is physically delivered to the market. In this case it also represents the amount sold to the market, as in this proposal British American will only pump up its sharing position in the market. As previously mentioned, in actual practice there will be a deduction to cover Scrubbing Plant shrinkage and fuel.

Column 12

Shows the actual volume of gas from the wells connected to the Gas & Oil Products plant that is physically delivered to the market. As in the case of wells connected to Madison this must not be confused with the gas sold to the market, as this equals the figure in this column less the volume of gas conserved, which is shown in Column 20.

Column 13

This is the sum of columns 10, 11 and 12, and represents the total gas actually physically delivered to the market.

Column 14

This shows the amount of gas from wells connected to the Madison system which is stored, that is, the amount actually pumped back underground. This total includes that

stored in Bow Island as well as in Turner Valley. It will be noted that no gas will be stored in winter months in 1945, as the market demands are then greater than the total of the residue gas from crude oil wells available to the market and some gas is shown withdrawn from gas cap.

Actually it can and will happen that gas will be withdrawn from the gas cap during the same months that gas is stored in the formation. That can be seen in April, I think, for example. No, take March. There is a total withdrawal from the Royalite gas cap as shown in Column 6 of 228,900,000 and there is a total of crude oil gas stored - no, that is B. A. Storage, I am wrong in that illustration. It does not so happen on that sheet. There are no actual deliveries from the Royalite gas cap in Column 6. I think in a later month in the year there is. No, it just so happens that this illustration does not work out that way but it does actually work out in practice as can be readily understood. You may have either in the Spring or the Fall a month in which you have a cold spell and also a hot spell. In the cold spell, you will have to be drawing some gas cap gas to supply the market and in the hot spell you would have to be repressuring some gas because the market demands were less than the amount of gas from crude oil wells that was available for the market. It also could happen and has happened over a period of one day. That is just another of those problems of balancing out the production of the wells against the market demand and it cannot be balanced out so that they will equal each other as it is quite apparent, over every hour of the day. It is quite obvious that is practically impossible.

Column 15

This shows the amount of gas from wells connected to the British American Plant that will be stored. Under the arrangement whereby British American stores all its own gas in excess of its current sharing position, there will be gas stored in the winter as well as the summer months, in contrast to the Madison and Gas & Oil Products systems where this excess is taken up by conserving gas, i.e. under-producing the Royalite gas cap below its share in the market a volume equal to the excess of crude oil gas available above the share in the market.

Column 16

This shows the volume of gas from wells connected to the Gas & Oil Products plant that will be stored by Madison, Gas & Oil Products having no equipment for this purpose. As with the Madison system in Column 14, there will be no gas stored in the winter months.

Column 17

This shows the total gas stored each month by the Madison and British American repressuring equipment. The total stored by the Madison equipment only is not shown, but is the sum of columns 14 and 16.

Column 18

Shows the volume of gas from the crude oil wells connected to the Madison system that will be conserved, i.e. delivered to the market in excess of its sharing position with an equal volume of Royalite gas cap under produced below its share in the market.

Column 19

Under the proposal no gas from wells connected to the British American plant is conserved, as all gas in excess of the share in the market is returned to the formation in the South end.

In contrast to the Royalite gas cap under this proposal British American will produce their full gas cap allowable each year.

Column 20

This shows the amount of gas from wells connected to the Gas & Oil Products plant that will be conserved.

Column 21

This shows the total gas that will be conserved, and is the sum of columns 18 and 20, and the same as those in Column 9.

Now I have just, when going through, taken figures from January to illustrate the point but each of the succeeding months of the year have been calculated in precisely the same way and then at the bottom you have the totals for the year added and given across, and of course the same principles apply to those totals, the only point being that the accounting has been done as I stated earlier we are doing it today on the monthly average basis.

There is another table in the back, Table 2. It has been prepared to show the sharing position in 1945 of each well connected to the Madison gas gathering system. The volumes in it are based on the estimates used in Table 1. That is the table we have just been looking at. The total for January under "Residue gas available for market"

in Table 2 is the same as that given for Madison gas gathering system for January in Table 1, Column 4. Similarly, the total for "Share of the market" in Table 2 comes from Table 1, Column 5, and for "Actual deliveries" from Column 6. The individual well figures were obtained from Report No. 2344, which was submitted as Attachment #1 to Madison Report M-3, and were taken from production data for September 1944.

It is of course just an estimate and was done for the benefit of the producers connected to the Madison gas gathering system to give them an idea of what their position would be in 1945. It was a very complicated sheet to produce and I hope we will never be asked to produce it again. It took about three men a week to do it, to get the proportions and smooth out the figures and then try and make it up so that the totals at the bottom would agree.

Again it is stressed that payment at full market price for gas sold to the market . . . . .

MR. CHAMBERS: Should not that be "well head" there? The full well head price?

A No. At the full market price for gas sold to the market will not be made under this proposal on "Actual Deliveries" so it is definitely the market price.

Again it is stressed that payment at full market price for gas sold to the market will not be made under this proposal on "Actual deliviries" but on "Share of the market" volumes. The difference between "Actual deliveries" and "Share of the market" being the volume conserved which it is proposed that Royalite will purchase at the market price, - now there is where your

correction should have been. Your correction should have been where I am at now, which is the last line but one of the first paragraph. "Which it is proposed that Royalite will purchase at the market price." That should have been "well head price".

Q Yes.

A Discounted for the number of years before the gas conserved will be actually used in the market. Now will you all correct your copies please on that because that is a very important point. That market price should have been well head price.

In conclusion it must be borne in mind that the above figures are only estimates used to illustrate the principle and that they should therefore not be used for purposes other than intended. Actual measured volumes and actual shrinkages and volumes used for fuel will, of course, be used in accounting.

That, of course, is being done. The shrinkages are actually determined by meters and applied and the same is also true of the fuel volumes used around the Madison plant. The principle can be followed then in the actual accounting sheets which if it is suitable now, we should put in as an Exhibit.

MR. CHAMBERS: Yes.

THE CHAIRMAN: It is three sheets making up the one document.

A Yes, that is right. I think it should be marked as one exhibit.

THREE ACCOUNTING SHEETS IN QUESTION NOW MARKED EXHIBIT 87.

A There are three sheets in Exhibit 87. The first sheet is

"Accounting Statement for Wet Gas Processed for 1945." That covers the wet gas processed at the Royalite Gasoline Plant No. 1. and its object is to arrive at the proper residue gas available for the market and to account back to each producer for his share of the gasoline content that has been taken out of the gas that he delivered to Madison at the lease and Royalite processed for Madison at their Gasoline Plant.

The second sheet is "Share of Market". That deals with the residue gas from the wet gas processed at Royalite Gasoline Plant No. 1.

MR. HARVIE: I wonder if you will wait until we get our copies so that we can follow it.

A Oh I beg pardon, I thought you had them. I would suggest that the Court Reporter read back what I said.

(Court Reporter read back explanation given by Mr. Stevens-Guille as to sheets number 1 and 2.)

A Going on from that point and still on the same sheet. Also brought onto this sheet are proper volumes for the residue gas available for market from the British American and G.O.P. or as it is correctly called here G.O.R. And then the third sheet which is the other of the two larger sheets is headed "Accounting made for Residue Gas Purchased." That deals completely with all the residue gas that is purchased and I think by looking at these sheets that you will agree with me that it would be a very difficult thing to go through explaining them from the stand here and I commend again my suggestion that we explain any point, if the Board concurs, with accountants after rather than trying to do it with these sheets.

THE CHAIRMAN: I think you are quite right in

that, Mr. Stevens-Guille.

A I do not think, Mr. Chambers, there is anything I can usefully add to what I have said in presenting that.

Q MR. CHAMBERS: Mr. Stevens-Guille, just one or two things I want to refer to as sort of highlights of Exhibit 86. As regards the crude gas share of the market that is not arbitrarily based on the Conservation Board allowables but on that portion of the allowables that are actually available to the . . . . .

A That is correct.

Q In other words the basis of the whole proposal is able to, which implies you can legally produce it and have the physical equipment to produce and are willing and ready to supply the market.

A That is right.

Q Is not that the essence of the whole problem?

(Go to page 2287)

Q And if gas goes by the wayside somewhere by flaring and so on, that is not regarded as gas available for the market?

A That is correct, independent of the quantity which is flared.

Q Now then take the gas cap share of the market, the Royalite gas cap is based primarily on the Conservation Board allowable?

A Yes.

Q That is the entire amount which you suggest is ready and available for the market at any time?

A That is so.

Q And the conserved gas, as you have explained, as the Royalite gas cap share of the market, that is not being produced from the gas cap by reason of Royalite's buying apparently a similar amount from the crude wells gas?

A That is correct. The amount which otherwise would have to be flared or returned to the formation if sufficient capacity was available to do so and as it is not available at the present time for the winter months.

Q And the merits, as I take it, of your proposal, you suggest is that the conserved gas proposition obviates the necessity of installing more compressors?

A That is correct.

MR. CHAMBERS: That is all I have unless you have anything else.

A No, I do not see anything else that I can add to what has been presented.

THE CHAIRMAN: Mr. Fenerty?

MR. FENERTY: No questions.

THE CHAIRMAN: Mr. Steer?

MR. STEER: No, I have no questions.

THE CHAIRMAN: Mr. Harvie?

MR. HARVIE: We have some questions, Mr. Chairman, but I would like to study first these new exhibits and I think I can save considerable time by having a chance to go over them with Mr. McCutcheon before I start my cross-examination.

THE CHAIRMAN: That seems reasonable. What do you say, Mr. McDonald.

MR. MCDONALD: There is one item that I have asked Mr. Stevens-Guille to give consideration to and it was the particular treatment of the G.O.P area and he has prepared a supplementary report at my request which it might be advisable to put in now so that it will be available for cross-examination, unless Mr. Stevens-Guille has other views on the point.

THE WITNESS: No.

MR. CHAMBERS: Oh no, it may be put in now and we will have the whole picture then.

THE WITNESS: I have not a copy with me.

MR. MCDONALD: I have it here. This is not the original, I think perhaps you retained the original.

TO THE CHAIRMAN:

Q Mr. Stevens-Guille, it has been suggested you might explain the term, at the top "share of market", the sheets of Exhibit 87?

A I will do that. Would you care for me to do that now or after Mr. McDonald has put this in.

THE CHAIRMAN: Do you want this read, Mr. McDonald.

MR. MCDONALD: Yes I think he should continue.

SUBMISSION PRODUCED HERE
MARKED AS EXHIBIT 88.

TO MR. McDONALD:

Q I refer to M-5, Exhibit 86, the Gas and Oil Products Refinery

fuel is part of the market?

A That is correct.

Q Now since this deal, this delivery from the Gas and Oil Refinery or the gas and oil area has been in effect, what effect has the compressor capacity of the line running from the G.O.P.Refinery to Madison 3 and hence to Hartell Junction and on to the Scrubbing Plant had on the sharing position?

A There have been times, Mr. McDonald, when the capacity of that compressor has not been sufficient to deliver all the gas available for the market and under our proposal then it means that the share in the market of the producers connected to the Gas and Oil Products Refinery has been less than would have been the case had the compressors' capacity been sufficient to deliver all the gas available.

Q And in discussions between the operators, producers we will s say, and Madison you arrived at a proposal which you embodied in a report?

A That is correct. I was present at the meeting.

Q Now would you read the report which has been marked as Exhibit 88.

A In the report, Exhibit 88, which is No.1445 and entitled;

REVENUE OF PRODUCERS CONNECTED TO
G.O.P. PLANT IF G.O.P. REFINERY
FUEL PART OF CALGARY MARKET,

compared to

REVENUE IF G.O.P. REFINERY FUEL IS
NOT PART OF CALGARY MARKET

INTRODUCTION

In Madison Reports M-2 (revised), M-2A, M-4 and M-5 it was assumed that the unscrubbed residue gas consumed as fuel by the G.O.P. Refinery would be included as part of the Calgary market.

It has been suggested that simplification in accounting would result, if the fuel requirements of this Refinery were not made part of the Calgary market for the purpose of determining the sharing position, and were instead supplied direct by the crude oil wells connected to the G.O.P.Plant. If this alternative is followed, the residue gas available from wells connected to the G.O.P. Plant for sharing in the Calgary market will be determined by the volume delivered to the Madison Scrubbing Plant by the residue gas booster installed at Madison Compressor Station #3 for this purpose.

The above two possibilities were recently discussed at a meeting of the Producers' Committee of the A.P.A. and the conclusion reached was that it would be desirable to estimate what the revenue would be to the producers connected to the G.O.P. Plant under each of the two alternatives mentioned. It was the feeling of the meeting that should the estimated revenue to the producers connected to the G.O.P. Plant be approximately the same in each case, that it would then be proper to recommend to the Natural Gas Utilities Board that the simpler of the two procedures be followed, namely that the G.O.P. Refinery fuel be excluded from the Calgary market for sharing position purposes for, at any rate, the current year. Before the end of 1945 sufficient information would be available to establish whether or not this procedure was equitable to all parties concerned. The meeting was of the opinion that if the estimated figures indicate that there would be no substantial difference in revenue to the producers connected to the G.O.P. Plant whichever of the two alternatives was to be followed, there would be little chance that by the end of 1945 conditions would have varied sufficiently from those assumed in the estimates to cause any material gain or loss to any producer

above or below his equitable share of the market. Under these circumstances they would be in favour of the G.O.P. Refinery fuel being excluded from the market.

CALCULATIONS

At the meeting referred to above, on April 2nd, Messrs. Jones and Carr of G.O.P. advised that their original estimate of the fuel requirements of the G.O.P. Refinery, as submitted to the Board at the preliminary hearing in May 1944 had been found by measurement to be approximately double the actual figure. They therefore supplied revised figures, a copy of which will be found in Table 2 attached. It was further felt desirable to recalculate the sharing position for 1945 using these revised G.O.P. Refinery fuel figures as part of the Calgary market in the one case, but excluding them from the Calgary market in the other. This was necess ry in order to put the revenue figures required for the comparative study on the same footing in both cases. These calculations were therefore made and are summarized in Columns 2 to 6 of Table 1.

Using this data from Table I, the estimated revenue that would accrue to the account of the producers connected to the G.O.P. Plant under each of the two alternatives was then determined and, as will be seen by reference to Table I, the estimated position appeared to be as follows: -

Revenue to Producers Connected to G.O.P.Plant

A. G.O P Refinery fuel considered in the Calgary market,-	$31,240.00
B. G.O.P. Refinery fuel considered not in the Calgary market,-	33,577.00
Increased revenue to producers connected to G.O.P. if G.O.P. Refinery fuel not included in Calgary market,-	2,337.00 or 7.5%

CONCLUSION

The difference in estimated revenue in the two cases, of $2,337.00 or 7.5%, is within the order of accuracy of the estimate, therefore it is reasonable to conclude that the producers connected to the G.O.P. Plant would neither gain nor lose an appreciable amount, if the simpler of the two alternatives from an accounting point of view is followed and the G.O.P. Refinery fuel is not considered part of the Calgary market.

It may be as well to emphasize that if the Board decides to exclude the G.O.P. refinery fuel consumption from the total market to be shared, this will not upset in principle Madison's proposal for sharing the market as contained in Report M-5, which is of course Exhibit 86 which I have submitted this morning, nor will it materially affect other estimates contained in Madison's reports in which it was assumed that the G.O.P. refinery fuel would be made part of the market to be shared between all producers, as the G.O.P. Refinery consumption is small in relation to the total market.

RECOMMENDATIONS

It is therefore recommended that it be proposed to the Board that the G.O.P. Refinery fuel be excluded from the total market to be shared and to be supplied direct from wells connected to the G.O.P. Plant.

Before just looking at the two tables I would like to point out the reason I was asked to submit that report was because the other figures had been prepared under my direction and as I understood the producers committee of the A.P.A. felt that therefore we would be in a better position to handle it than anybody else so we prepared the figures summarized in the report and set forth in more detail in Table I.

I do not think there is any need for me to read

through the construction of Table I. There are explanatory remarks at the bottom and if there is any point not understood I would be very glad to explain the matter here or to anybody after the Session is over.

Table 2 is just a reconciliation of the figures used during the preparation of the report so if, Mr. McDonald, unless you feel we should go into the details of the calculations....

Q No, I do not think so. I am going to call Mr. Carr of the Gas and Oil Products to establish the figures set out in Table 2?

A That is right. They were supplied to us by him. I might add one point there perhaps, Mr. McDonald, and that is that at the present time we are accounting excluding the fuel used in the G.O.P. Refinery in the market, excluding, and we trust therefore that the Board's direction will be along those lines.

THE CHAIRMAN: 9.30 on Tuesday morning.

MR. CHAMBERS: That brings up a question whether Mr. Stevens-Guille will take all next week or not. Have you any idea?

MR. MCDONALD: I really think we should finish the sharing position next week. I intend to call Mr. Carr. Now Mr. Jamieson, are you going to call him with regard to submission #3.

MR. CHAMBERS: I will call him on one of these reports and that is one reason I brought this up, I just wanted to find out if any other witnesses would be required.

THE CHAIRMAN: There is a lot of cross-examination still to be done. I have just forgotten which Exhibits we were dealing with when we adjourned in April. I think, Mr. Stevens-Guille, you had given your evidence in chief but there had been no cross-examination?

A Yes, I had been cross-examined by Mr. Fenerty and I think Mr. Steer was not here at that time and Mr. Harvie and Mr. McDonald

and Mr. Blanchard had all cross-examined me.

Q THE CHAIRMAN: It may then not take very long?

A I understand there is some re-examination.

MR. CHAMBERS: I was wondering if Mr. Harvie would have a witness next week on the sharing position.

MR. HARVIE: It is expected that Mr. McCutcheon will be giving evidence on that but I do think so far as our evidence is concerned we will just tie it in very closely to the evidence already in so our evidence will not be extensive on that point.

THE CHAIRMAN: Well I suppose now that we have started the sharing position we should continue with that next week and finish it if we can.

MR. CHAMBERS: I think so.

THE CHAIRMAN: And then if there is time left we will go back to the cross-examinations of Mr. Stevens-Guillo.

MR. HARVIE: Do I understand that we are to sit on Tuesday, Wednesday and Thursday of next week.

THE CHAIRMAN: That is right, Mr. Harvie.

(The Inquiry was here adjourned to be resumed at 9.30 a.m. on Tuesday, June 26th, 1945).